

# Morbidity and Mortality

Weekly  
Report

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE

Prepared by the COMMUNICABLE DISEASE CENTER

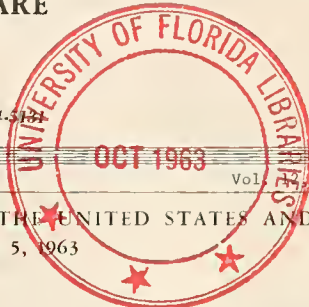
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For release October 11, 1963

ATLANTA, GEORGIA 30333

Vol. 40, No. 40

PROVISIONAL INFORMATION ON SELECTED NOTIFIABLE DISEASES IN THE UNITED STATES AND ON DEATHS IN SELECTED CITIES FOR WEEK ENDED OCTOBER 5, 1963



## EPIDEMIC BOTULISM RELATED TO SMOKED FISH INGESTION

A sharp outbreak of botulism related to the ingestion of smoked fish products has resulted in a total of 13 cases of the disease with 6 fatalities. The cases which had onsets from September 29 - October 7 occurred among seven members of three different families in Knoxville, Tennessee, in 3 unrelated individuals in Nashville, Tennessee, a boy in Huntsville, Alabama, and in a husband and wife in Kalamazoo, Michigan.

Pertinent information on each of these cases as available through noon October 9 is summarized in the line listing in Table 1. Each of the Tennessee cases and the Alabama case had consumed varying amounts of a commercially prepared plastic wrapped product known as

"vacuum packed smoked whitefish chubs" produced by the H. J. Dornbos and Brother Company of Grand Haven, Michigan, and distributed by Kroger's supermarkets. The two Michigan cases had eaten smoked whitefish but the commercial source of this is as yet uncertain. Therefore, no clearcut link between the two occurrences exists at the moment.

Dr. Glenn G. Slocum, Director, Division of Microbiology, Food and Drug Administration reports that type E botulinus toxin has been demonstrated in specimens of smoked fish remaining in the refrigerator of the Kalamazoo couple and also in samples of chubs from the same plastic package that contained fish eaten by two of the Tennessee fatalities (Family B, Knoxville).

From preliminary information regarding distribution of the commercial product "Dornbos smoked whitefish

Table 1. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
(Cumulative totals include revised and delayed reports through previous week)

Disease	40th Week			Cumulative		
	Ended	Ended	Median	First 40 weeks		
	October 5, 1963	October 6, 1962	1958 - 1962	1963	1962	Median 1958 - 1962
Aseptic meningitis.....	58	89	---	1,385	1,945	---
Brucellosis.....	8	9	17	285	320	583
Diphtheria.....	8	17	17	194	323	497
Encephalitis, infectious.....	23	47	55	1,220	1,466	1,466
Hepatitis, infectious and serum...	877	947	811	33,507	42,874	28,847
Measles.....	805	1,331	1,026	360,881	445,694	398,286
Meningococcal infections.....	39	32	40	1,873	1,659	1,768
Poliomyelitis, total.....	19	37	130	305	645	2,426
Paralytic.....	15	34	101	257	507	1,671
Nonparalytic.....	2	3	24	31	101	523
Unspecified.....	2	-	5	17	37	232
Streptococcal sore throat and Scarlet fever.....	4,649	4,406	---	263,871	245,695	---
Tetanus.....	6	11	---	202	213	---
Tularemia.....	4	7	---	221	230	---
Typhoid fever.....	19	15	15	410	489	633
Typhus fever, tick-borne, (Rocky Mountain spotted).....	3	2	---	164	198	---
Rabies in Animals.....	62	58	58	2,938	2,980	2,977

Table 2. NOTIFIABLE DISEASES OF LOW FREQUENCY

Anthrax:	Cum.	Psittacosis: Calif. - 1	Cum.
Botulism: Tenn. - 10, Mich. - 2	4	Rabies in Man:	62
Malaria: Conn. - 1	29	Smallpox:	1
Plague:	71	Typhus, murine:	-
	-		21

TABLE I  
Botulism Cases - Tennessee - Michigan  
Epidemiological Data

Case Identification	Age	Sex	Time Onset	Source Food	Time Food Eaten	Other
<u>Knoxville, Tenn.</u>						
Family A						
Case #1	42	M	10/3	Each had 1/2 of same whitefish chub*	10/2 - supper	Slow progression
Case #2	42	F	10/3		10/2 - supper	Mild
Family B						
Case #3	32	M	10/5 afternoon	Each had 1/2 of same whitefish chub*	10/5 - breakfast	Died 10/7, 7:45 a. m.
Case #4	10	F	10/5 afternoon		10/5 - breakfast	Died 10/7, 7:30 a. m.
Family C						
Case #5	39	F	10/7 5:00 a. m.	Each had portions of one whitefish chub*	10/6 - 1:00 p. m.	Severe
Case #6	10	F	10/7 - 5:00 a. m.		10/6 - 1:00 p. m.	Severe
Case #7	8	F	10/7 - 5:00 a. m.		10/6 - 1:00 p. m.	Severe
<u>Nashville, Tenn.</u>						
Case #8	30	M	9/29-a. m.	Smoked whitefish chubs*	9/28 - supper	Adm. Dx. - Myasthenia gravis Died 9/30 Dx. botulism retrospect
Case #9	53	M	10/7	Smoked whitefish chubs*	10/6 - p. m.	Some family members ate small amounts of fish without ill effect
Case #12	51	F	10/6-a. m.	Smoked whitefish chubs*	10/5 - p. m.	Ate all fish in package Died 10/6 - p. m.
<u>Huntsville, Ala.</u>						
Case #13	5	M	10/5-a. m.	Smoked whitefish chubs*	10/4 - noon	Mother, grandmother also ate small amount - not ill
<u>Kalamazoo, Mich.</u>						
Family D						
Case #10	64	M	10/2	Smoked whitefish**	10/1	Died 10/2
Case #11	62	F	10/2	Smoked whitefish**	10/1	Died 10/2

\*Source Food - Dornbos and Brother Company, Grand Haven, Michigan

\*\*Source unknown

chubs," it would appear that all the Tennessee and Alabama cases could be accounted for on the basis of one shipment of the product to Kroger's warehouse in Nashville. This shipment, the first for several months, was packed in dry ice and left Grand Haven on September 19, arriving in Nashville on September 25. It was then distributed to 18 Kroger stores in Tennessee as well as northern Alabama and southern Kentucky. The shipment to Knoxville arrived September 27 and was placed on shelves for sale on September 30 at the Kingston Pike Kroger supermarket.

Four Tennessee cases have been treated with Type E. antiserum. Connaught Medical Research Laboratories, Toronto, the sole supplier, reports that the supplies of Type E botulinum antisera are quite limited. These include both the monovalent Type E and polyvalent ABEF of Danish manufacture. Usual treatment of clinical cases consists of an initial dose of two vials (one IV and one IM). It is suggested that all cases with significant symptoms and a history of ingesting smoked fish be treated with Type E antiserum in one of the available forms. Additional supportive therapy directed at problems of respiratory depression has included tracheotomy as well as the use of tank respirators.

According to the records of CDC, only six previous outbreaks of Type E botulism are known to have occurred in the United States. These outbreaks are summarized in

Table II. It will be noted that with the exception of the San Francisco outbreak in 1941, all of the outbreaks of Type E botulism in the United States have been related to fish products and raw white whale flippers (not strictly a fish product).

TABLE II  
KNOWN OUTBREAKS OF C. BOTULISM TYPE E  
IN THE UNITED STATES

Year	Number of Cases	Number of Deaths	Location	Contaminated Food Items
1934	3	1	Westchester, N. Y.	Commercially canned sprats from Germany
1934	3	1	Cooperstown, N. Y.	Labrador smoked salmon
1941	3	1	San Francisco, Calif.	Mushrooms from Yugoslavia canned in California
1950	5	0	Point Hope, Alaska	Raw white whale flipper
1960	2	2	Minneapolis, Minn.	Plastic vacuum packed smoked ciscoes caught in the Great Lakes
1963	3	2	Wayne County, Mich.	Tuna fish canned in California
Total	19	8		

## POLIOMYELITIS

A total of 19 cases of poliomyelitis, 15 with paralysis, were reported for the week ending October 5. During the

corresponding week in 1962, there were 37 cases reported. Three cases were reported by Pennsylvania, Michigan, Georgia and Alabama, two each by Indiana and Arizona, and single cases from Illinois, Virginia and California.

The cumulative totals, presented below, continue to reflect about one-half the incidence of polio as compared to 1962.

POLIOMYELITIS THROUGH THE 40TH WEEK  
FOR PAST FIVE YEARS

	1963	1962	1961	1960	1959
Paralytic	257	507	642	1675	4284
Total	305	645	992	2420	6652

The six week totals for 1963 and the previous four years are listed below:

SIX WEEKS TOTALS (35TH THRU 40TH WEEK)  
FOR PAST FIVE YEARS

	1963	1962	1961	1960	1959
Paralytic	87	171	260	709	1757
Total	106	209	433	1052	2734

## EPIDEMIOLOGICAL REPORTS

### Dengue Fever — Puerto Rico

There have been 1,493 cases of dengue fever reported in the last week by the Puerto Rico Department of Health,

bringing the total to 14,455 cases as of noon, October 7, 1963. Although 67 of 77 *municipios* have reported cases, the predominant number of cases continue to be reported from relatively few of the *municipios*; 12 *municipios* account for 74 percent of the 14,455 cases.

Naguabo (population:17,195) is the most recent *municipio*, and the first one on the eastern end of the island, to report 250 or more cases. There have been 323 cases reported in Naguabo, of which 135 were reported during the past week.

Intensive day-to-day surveillance continues in Barriada Frailes Llanos and Barriada Marrero in the township of Guaynabo. Attack rates in these population groups are given below:

Period	Area	Population	Dengue-like Illness	Attack Rate (%)
Aug. 1 thru Sept. 24	Guaynabo Township*	868	153	17.6
Aug. 1 thru Oct. 7	Barriada Frailes Llanos	488	115	23.6
Aug. 1 thru Oct. 7	Barriada Marrero	209	75	35.9

\*From Morbidity survey conducted on September 24 and 25; a follow-up survey is planned on October 15 and 16.

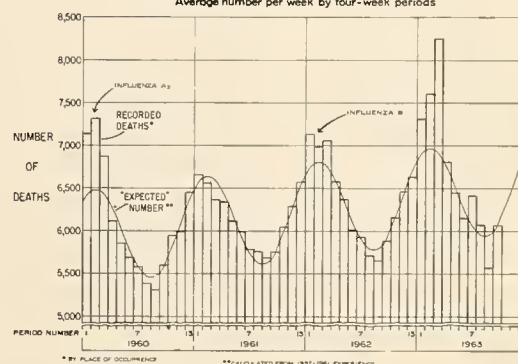
The average duration of illness has ranged from 5.0 days in Barriada Frailes Llanos to 6.1 days in Barriada Marrero to 6.5 days for the entire township of Guaynabo. The distribution of clinical symptoms and signs among patients in these areas is summarized on page 336.

## SUMMARY OF DEATHS AMONG PERSONS 65 YEARS AND OVER IN 108 U. S. CITIES

The weekly average number of deaths among persons 65 years and over in 108 cities for the four-week period ending October 5 was 6,070 as compared with an expected weekly average of 6,095.

	WEEK ENDING				4 Week Total	Weekly Average
	9/14	9/21	9/28	10/5		
Observed	5,958	5,993	6,104	6,227	24,282	6,070
Expected	6,024	6,067	6,117	6,171	24,379	6,095
Excess	- 66	- 74	- 13	56	- 97	- 25

DEATHS AT AGE 65 AND OVER IN 108 U.S. CITIES  
Average number per week by four-week periods



(See Table, page 335)

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Table 5. CASES OF SPECIFIED NOTIFIABLE DISEASES. UNITED STATES  
FOR WEEKS ENDED

OCTOBER 5, 1963 AND OCTOBER 6, 1962

Area	Poliomyelitis, total cases				Poliomyelitis, paralytic				Poliomyelitis, nonparalytic		Aseptic Meningitis	
	40th week		Cumulative First 40 weeks		40th week		Cumulative First 40 weeks		40th week		40th week	
	1963	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963	1962
UNITED STATES.....	19	37	305	645	15	34	257	507	2	3	58	89
NEW ENGLAND.....	-	-	4	7	-	-	4	7	-	-	-	-
Maine.....	-	-	1	-	-	-	1	-	-	-	-	-
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	1	-	-	-	1	-	-	-	-	-
Massachusetts.....	-	-	2	6	-	-	2	6	-	-	-	-
Rhode Island.....	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut.....	-	-	-	1	-	-	-	1	-	-	-	-
MIDDLE ATLANTIC.....	3	2	96	67	3	2	74	47	-	-	5	-
New York.....	-	2	8	52	-	2	5	34	-	-	5	-
New Jersey.....	-	-	1	6	-	-	1	6	-	-	-	-
Pennsylvania.....	3	-	87	9	3	-	68	7	-	-	-	-
EAST NORTH CENTRAL.....	6	10	48	80	4	9	36	56	-	1	16	16
Ohio.....	-	1	8	17	-	1	4	15	-	-	5	7
Indiana.....	2	1	4	14	-	1	1	10	-	-	1	2
Illinois.....	1	8	15	35	1	7	14	23	-	1	2	4
Michigan.....	3	-	15	9	3	-	15	6	-	-	8	3
Wisconsin.....	-	-	6	5	-	-	2	2	-	-	-	-
WEST NORTH CENTRAL.....	-	2	5	31	-	2	5	21	-	-	1	8
Minnesota.....	-	-	4	6	-	-	4	6	-	-	1	5
Iowa.....	-	-	-	5	-	-	-	2	-	-	-	-
Missouri.....	-	-	-	9	-	-	-	4	-	-	-	-
North Dakota.....	-	-	-	3	-	-	-	1	-	-	-	-
South Dakota.....	-	-	-	1	-	-	-	1	-	-	-	-
Nebraska.....	-	2	1	7	-	2	1	7	-	-	-	1
Kansas.....	-	-	-	-	-	-	-	-	-	-	-	2
SOUTH ATLANTIC.....	4	5	42	51	3	5	37	45	1	-	5	4
Delaware.....	-	-	1	-	-	-	1	-	-	-	-	-
Maryland.....	-	-	-	1	-	-	-	1	-	-	-	-
District of Columbia..	-	-	-	2	-	-	-	1	-	-	-	1
Virginia.....	1	-	8	7	-	-	5	7	1	-	-	1
West Virginia.....	-	-	1	5	-	-	1	5	-	-	1	1
North Carolina.....	-	3	3	8	-	3	3	7	-	-	-	-
South Carolina.....	-	1	6	6	-	1	5	6	-	-	-	1
Georgia.....	3	1	17	12	3	1	16	11	-	-	-	-
Florida.....	-	-	6	10	-	-	6	7	-	-	4	-
EAST SOUTH CENTRAL.....	3	2	63	60	3	2	59	49	-	-	8	7
Kentucky.....	-	-	1	25	-	-	1	19	-	-	8	-
Tennessee.....	-	-	8	9	-	-	8	4	-	-	-	1
Alabama.....	3	-	47	22	3	-	43	22	-	-	-	1
Mississippi.....	-	2	7	4	-	2	7	4	-	-	-	5
WEST SOUTH CENTRAL.....	-	11	24	272	-	9	23	213	-	2	1	12
Arkansas.....	-	2	4	11	-	2	3	11	-	-	1	-
Louisiana.....	-	-	14	19	-	-	14	17	-	-	-	-
Oklahoma.....	-	3	-	15	-	2	-	12	-	1	-	3
Texas.....	-	6	6	227	-	5	6	173	-	1	-	9
MOUNTAIN.....	2	-	4	12	2	-	3	8	-	-	2	3
Montana.....	-	-	-	3	-	-	-	2	-	-	-	2
Idaho.....	-	-	1	2	-	-	1	1	-	-	-	-
Wyoming.....	-	-	-	2	-	-	-	1	-	-	-	-
Colorado.....	-	-	-	1	-	-	-	-	-	-	1	1
New Mexico.....	-	-	1	-	-	-	-	-	-	-	-	-
Arizona.....	2	-	2	3	2	-	2	3	-	-	1	-
Utah.....	-	-	-	1	-	-	-	1	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	1	5	19	65	-	5	16	61	1	-	20	39
Washington.....	-	-	1	2	-	-	1	2	-	-	3	2
Oregon.....	-	-	2	5	-	-	1	5	-	-	1	1
California.....	1	5	16	58	-	5	14	54	1	-	16	36
Alaska.....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii.....	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	-	1	5	12	-	1	4	12	-	-	-	-

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Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED

OCTOBER 5, 1963 AND OCTOBER 6, 1962 - (Continued)

Area	Brucellosis		Diphtheria		Encephalitis, infectious		Hepatitis, infectious and serum				Measles	
	40th week	Cumulative 40 weeks	40th week	Cumulative 40 weeks	40th week		40th week				40th week	
							Under 20 yr.	20 & over	Total			
1963	1963	1963	1963	1963	1962	1963	1963	1963	1962	1963	1962	
UNITED STATES.....	8	285	8	194	23	47	475	359	877	947	805	1,331
NEW ENGLAND.....	-	1	-	8	1	-	70	42	116	97	39	61
Maine.....	-	-	-	-	-	-	36	16	52	28	6	2
New Hampshire.....	-	-	-	-	-	-	11	6	17	19	1	1
Vermont.....	-	1	-	-	-	-	4	3	7	2	4	19
Massachusetts.....	-	-	-	6	-	-	15	5	21	38	9	21
Rhode Island.....	-	-	-	2	1	-	1	2	6	4	4	5
Connecticut.....	-	-	-	-	-	-	3	10	13	6	15	13
MIDDLE ATLANTIC.....	-	6	-	21	9	9	110	94	204	198	117	96
New York.....	-	3	-	13	6	6	66	54	120	99	75	46
New Jersey.....	-	1	-	3	-	-	9	14	23	33	25	15
Pennsylvania.....	-	2	-	5	3	3	35	26	61	66	17	35
EAST NORTH CENTRAL.....	-	30	-	23	1	4	73	49	129	174	230	259
Ohio.....	-	-	-	1	1	2	17	14	33	53	19	22
Indiana.....	-	5	-	5	-	-	8	4	12	24	43	50
Illinois.....	-	18	-	12	-	1	13	4	18	45	69	26
Michigan.....	-	5	-	3	-	1	33	27	60	46	52	72
Wisconsin.....	-	2	-	2	-	-	2	-	6	6	47	89
WEST NORTH CENTRAL.....	4	159	-	38	3	-	19	19	38	48	13	278
Minnesota.....	-	8	-	15	1	-	1	3	4	16	2	7
Iowa.....	2	117	-	1	-	-	7	6	13	13	6	212
Missouri.....	-	12	-	1	1	-	1	8	9	5	1	20
North Dakota.....	-	-	-	2	-	-	9	-	9	-	4	36
South Dakota.....	2	10	-	11	1	-	-	-	-	1	-	1
Nebraska.....	-	6	-	8	-	-	-	-	-	8	-	2
Kansas.....	-	6	-	-	-	-	1	2	3	5	NN	NN
SOUTH ATLANTIC.....	3	18	1	44	-	21	64	30	94	88	101	105
Delaware.....	-	-	-	-	-	-	4	-	4	-	-	3
Maryland.....	-	-	-	-	-	-	10	4	14	10	20	9
District of Columbia..	-	-	-	1	-	-	1	2	3	2	-	-
Virginia.....	1	8	-	-	-	1	14	5	19	15	42	4
West Virginia.....	-	-	-	1	-	1	6	4	10	4	31	40
North Carolina.....	-	4	-	2	-	1	10	4	14	21	1	-
South Carolina.....	-	-	-	17	-	1	6	1	7	4	4	8
Georgia.....	-	3	1	14	-	-	7	5	12	14	1	-
Florida.....	2	3	-	9	-	17	6	5	11	18	2	41
EAST SOUTH CENTRAL.....	-	13	2	16	1	3	27	25	52	80	35	56
Kentucky.....	-	3	-	-	-	-	8	5	13	26	16	15
Tennessee.....	-	6	-	3	-	1	6	13	19	15	15	27
Alabama.....	-	4	-	10	-	-	11	3	14	24	-	6
Mississippi.....	-	-	2	3	1	2	2	4	6	15	4	8
WEST SOUTH CENTRAL.....	-	32	5	35	-	5	21	19	40	63	72	72
Arkansas.....	-	7	-	2	-	3	2	1	3	7	-	1
Louisiana.....	-	8	5	18	-	-	5	5	10	17	-	1
Oklahoma.....	-	5	-	6	-	-	-	-	-	5	1	-
Texas.....	-	12	-	9	-	2	14	13	27	34	71	70
MOUNTAIN.....	-	9	-	5	2	-	15	9	53	50	59	227
Montana.....	-	-	-	-	-	-	2	4	8	1	17	153
Idaho.....	-	-	-	-	-	-	-	-	7	2	8	20
Wyoming.....	-	1	-	-	-	-	-	-	-	-	-	2
Colorado.....	-	-	-	3	-	-	3	1	12	17	13	29
New Mexico.....	-	-	-	2	-	-	6	3	10	6	NN	NN
Arizona.....	-	3	-	-	2	-	-	-	11	14	6	6
Utah.....	-	5	-	-	-	-	4	1	5	9	15	13
Nevada.....	-	-	-	-	-	-	-	-	-	1	-	4
PACIFIC.....	1	17	-	4	6	5	76	72	151	149	139	177
Washington.....	-	-	-	-	-	-	16	5	22	19	28	37
Oregon.....	-	3	-	-	2	-	8	6	16	19	22	20
California.....	1	13	-	4	4	5	49	58	107	104	66	56
Alaska.....	-	-	-	-	-	-	3	3	6	7	20	21
Hawaii.....	-	1	-	-	-	-	-	-	-	-	3	43
Puerto Rico.....	-	-	-	12	-	-	8	3	11	16	20	31

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Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES, UNITED STATES  
FOR WEEKS ENDED

OCTOBER 5, 1963 AND OCTOBER 6, 1962 - (Continued)

Area	Meningococcal Infections		Streptococcal Sore Throat & Scarlet Fever		Tetanus	Typhus (Rocky Mt. Spotted)	Tularemia	Typhoid Fever		Rabies in Animals		
	40th wk.	Cumulative 40 weeks	40th week	40th wk.	40th wk.	40th wk.	40th wk.	40th wk.	Cumulative 40 weeks	40th week		Cumulative 40 weeks
										40th wk.	40th wk.	
1963	1963	1963	1962	1963	1963	1963	1963	1963	1963	1962	1963	
UNITED STATES....	39	1,873	4,649	4,406	6	3	4	19	410	62	58	2,938
NEW ENGLAND.....	4	116	266	292	-	-	-	-	11	1	-	27
Maine.....	-	17	14	95	-	-	-	-	2	1	-	2
New Hampshire.....	-	4	1	2	-	-	-	-	-	-	-	12
Vermont.....	-	4	5	4	-	-	-	-	1	-	-	12
Massachusetts.....	1	54	69	37	-	-	-	-	6	-	-	1
Rhode Island.....	1	11	15	11	-	-	-	-	-	-	-	-
Connecticut.....	2	26	162	143	-	-	-	-	2	-	-	-
MIDDLE ATLANTIC....	2	254	177	136	1	1	-	3	77	2	11	92
New York.....	1	120	135	90	-	-	-	3	37	1	9	68
New Jersey.....	1	36	28	14	-	-	-	-	5	-	-	-
Pennsylvania.....	-	98	14	32	1	1	-	-	35	1	2	24
EAST NORTH CENTRAL..	6	290	316	366	1	-	1	8	47	9	6	459
Ohio.....	-	77	26	43	1	-	-	1	16	6	2	269
Indiana.....	2	45	72	85	-	-	-	-	7	-	1	42
Illinois.....	2	55	42	77	-	-	-	-	9	1	2	65
Michigan.....	1	85	122	77	-	-	-	7	10	1	-	43
Wisconsin.....	1	28	54	84	-	-	1	-	5	1	1	40
WEST NORTH CENTRAL..	2	117	116	145	2	-	-	1	24	16	12	752
Minnesota.....	1	23	6	9	1	-	-	-	3	5	-	189
Iowa.....	-	7	26	32	1	-	-	1	3	6	8	285
Missouri.....	-	34	25	13	-	-	-	-	14	3	2	122
North Dakota.....	1	13	54	83	-	-	-	-	-	-	-	29
South Dakota.....	-	5	3	-	-	-	-	-	1	1	2	82
Nebraska.....	-	24	-	1	-	-	-	-	1	1	-	27
Kansas.....	-	11	2	7	-	-	-	-	2	-	-	18
SOUTH ATLANTIC.....	7	345	545	378	1	1	-	1	53	14	7	419
Delaware.....	-	4	1	3	-	-	-	-	3	-	-	1
Maryland.....	-	50	7	9	-	-	-	-	9	-	-	-
Dist. of Columbia..	-	6	1	2	-	-	-	-	-	-	-	-
Virginia.....	2	77	149	76	-	1	-	-	8	9	3	154
West Virginia.....	1	18	219	121	-	-	-	-	6	2	4	108
North Carolina.....	2	62	7	17	1	-	-	1	7	2	-	14
South Carolina.....	-	18	33	50	-	-	-	-	3	1	-	8
Georgia.....	-	28	7	5	-	-	-	-	2	-	-	65
Florida.....	2	82	121	95	-	-	-	-	15	-	-	69
EAST SOUTH CENTRAL..	1	135	763	627	1	-	-	2	58	7	4	235
Kentucky.....	-	29	62	49	1	-	-	-	12	2	-	111
Tennessee.....	1	61	650	528	-	-	-	-	21	5	4	107
Alabama.....	-	23	26	14	-	-	-	1	10	-	-	17
Mississippi.....	-	22	25	36	-	-	-	1	15	-	-	-
WEST SOUTH CENTRAL..	2	170	579	688	-	1	3	4	75	3	7	557
Arkansas.....	-	11	4	-	-	1	3	4	29	3	1	66
Louisiana.....	1	70	6	2	-	-	-	-	22	-	-	42
Oklahoma.....	1	31	9	1	-	-	-	-	5	-	1	49
Texas.....	-	58	560	685	-	-	-	-	19	-	5	400
MOUNTAIN.....	-	60	1,026	1,040	-	-	-	-	16	4	4	117
Montana.....	-	3	24	30	-	-	-	-	-	-	-	-
Idaho.....	-	6	45	82	-	-	-	-	-	-	-	-
Wyoming.....	-	4	10	7	-	-	-	-	-	-	-	-
Colorado.....	-	16	407	369	-	-	-	-	6	-	-	16
New Mexico.....	-	4	277	386	-	-	-	-	3	2	-	37
Arizona.....	-	10	188	88	-	-	-	-	7	2	4	53
Utah.....	-	14	72	72	-	-	-	-	-	-	-	-
Nevada.....	-	3	3	6	-	-	-	-	-	-	-	11
PACIFIC.....	15	386	861	734	-	-	-	-	49	6	7	280
Washington.....	2	30	295	218	-	-	-	-	2	-	-	-
Oregon.....	1	28	11	35	-	-	-	-	2	-	1	8
California.....	12	308	384	456	-	-	-	-	42	6	6	263
Alaska.....	-	12	24	5	-	-	-	-	1	-	-	9
Hawaii.....	-	8	147	20	-	-	-	-	2	-	-	-
Puerto Rico.....	-	7	4	1	-	-	-	-	12	1	4	13

Table 4 (D). TOTAL DEATHS AMONG PERSONS 65 YEARS AND OVER IN REPORTING CITIES

(Tables 4(A), 4(B), 4(C), and 4(D) will be published in sequence covering a four-week period.)<sup>o</sup>

Area	For weeks ending				Area	For weeks ending			
	9/14	9/21	9/28	10/5		9/14	9/21	9/28	10/5
<b>NEW ENGLAND:</b>					<b>SOUTH ATLANTIC:</b>				
Boston, Mass.....	120	132	148	121	Atlanta, Ga.....	46	44	53	45
Bridgeport, Conn.....	12	19	29	24	Baltimore, Md.....	91	111	135	143
Cambridge, Mass.....	13	14	16	25	Charlotte, N.C.....	23	12	15	20
Fall River, Mass.....	16	14	22	14	Jacksonville, Fla.....	21	28	16	26
Hartford, Conn.....	32	27	24	26	Miami, Fla.....	37	39	45	48
Lowell, Mass.....	16	17	17	15	Norfolk, Va.....	21	21	27	28
Lynn, Mass.....	15	13	17	13	Richmond, Va.....	42	36	39	38
New Bedford, Mass.....	20	20	20	23	Savannah, Ga.....	12	15	12	10
New Haven, Conn.....	23	27	32	24	St. Petersburg, Fla.....	60	47	45	61
Providence, R.I.....	30	31	37	37	Tampa, Fla.....	24	49	32	26
Somerville, Mass.....	7	5	10	12	Washington, D.C.....	84	93	72	99
Springfield, Mass.....	19	27	23	22	Wilmington, Del.....	13	20	17	11
Waterbury, Conn.....	19	20	18	18					
Worcester, Mass.....	30	30	30	30	<b>EAST SOUTH CENTRAL:</b>				
<b>MIDDLE ATLANTIC:</b>					Birmingham, Ala.....	43	33	31	34
Albany, N.Y.....	28	25	26	27	Chattanooga, Tenn.....	23	19	18	18
Allentown, Pa.....	28	19	23	24	Knoxville, Tenn.....	27	24	17	11
Buffalo, N.Y.....	81	73	60	80	Louisville, Ky.....	60	81	60	66
Camden, N.J.....	24	23	21	27	Memphis, Tenn.....	73	48	38	56
Elizabeth, N.J.....	8	19	13	16	Mobile, Ala.....	21	21	14	16
Erie, Pa.....	25	15	23	12	Montgomery, Ala.....	17	21	17	15
Jersey City, N.J.....	31	41	33	29	Nashville, Tenn.....	54	37	43	42
Newark, N.J.....	45	47	40	46	<b>WEST SOUTH CENTRAL:</b>				
New York City, N.Y.....	822	874	972	921	Austin, Tex.....	30	24	10	15
Paterson, N.J.....	14	17	17	24	Baton Rouge, La.....	19	14	17	15
Philadelphia, Pa.....	279	237	285	282	Corpus Christi, Tex.....	14	11	8	8
Pittsburgh, Pa.....	114	89	103	108	Dallas, Tex.....	62	68	58	63
Reading, Pa.....	27	41	27	32	El Paso, Tex.....	16	13	18	13
Rochester, N.Y.....	57	67	70	76	Fort Worth, Tex.....	34	38	30	30
Schenectady, N.Y.....	13	16	12	11	Houston, Tex.....	76	84	92	81
Scranton, Pa.....	24	25	25	32	Little Rock, Ark.....	24	29	30	29
Syracuse, N.Y.....	41	36	34	37	New Orleans, La.....	64	65	77	89
Trenton, N.J.....	28	19	21	27	Oklahoma City, Okla.....	36	37	42	34
Utica, N.Y.....	16	22	14	15	San Antonio, Tex.....	57	49	61	50
Yonkers, N.Y.....	15	15	14	15	Shreveport, La.....	27	27	20	19
<b>EAST NORTH CENTRAL:</b>					Tulsa, Okla.....	40	25	12	36
Akron, Ohio.....	19	36	35	26	<b>MOUNTAIN:</b>				
Canton, Ohio.....	17	17	20	23	Albuquerque, N. Mex.....	10	16	13	26
Chicago, Ill.....	369	401	388	383	Colorado Springs, Colo.....	15	10	8	7
Cincinnati, Ohio.....	104	99	75	87	Denver, Colo.....	63	61	63	64
Cleveland, Ohio.....	108	112	105	124	Ogden, Utah.....	6	10	9	9
Columbus, Ohio.....	67	62	53	67	Phoenix, Ariz.....	40	44	50	36
Dayton, Ohio.....	43	41	47	55	Pueblo, Colo.....	4	10	5	6
Detroit, Mich.....	185	187	151	217	Salt Lake City, Utah.....	28	32	34	29
Evansville, Ind.....	18	17	24	21	Tucson, Ariz.....	20	18	11	19
Flint, Mich.....	29	22	28	16	<b>PACIFIC:</b>				
Fort Wayne, Ind.....	20	21	20	24	Berkeley, Calif.....	11	6	11	15
Cary, Ind.....	19	5	12	10	Fresno, Calif.....	22	13	27	33
Grand Rapids, Mich.....	40	35	31	30	Glendale, Calif.....	22	22	28	37
Indianapolis, Ind.....	76	71	88	93	Honolulu, Hawaii.....	23	18	10	22
Madison, Wis.....	15	8	11	24	Long Beach, Calif.....	33	33	38	56
Milwaukee, Wis.....	77	69	74	73*	Los Angeles, Calif.....	269	331	320	390
Peoria, Ill.....	12	15	15	11	Oakland, Calif.....	66	54	53	52
Rockford, Ill.....	13	11	19	17	Pasadena, Calif.....	25	30	20	23
South Bend, Ind.....	30	28	30	23	Portland, Oreg.....	79	56	81	59
Toledo, Ohio.....	61	58	65	57	Sacramento, Calif.....	33	25	32	40
Youngstown, Ohio.....	35	35	26	42	San Diego, Calif.....	39	45	55	57
<b>WEST NORTH CENTRAL:</b>					San Francisco, Calif.....	122	101	110	91
Des Moines, Iowa.....	45	36	32	28	San Jose, Calif.....	23	20	17	16
Duluth, Minn.....	20	21	18	20	Seattle, Wash.....	80	85	73	80
Kansas City, Kans.....	19	17	15	10	Spokane, Wash.....	34	26	33	26
Kansas City, Mo.....	73	72	76	59	Tacoma, Wash.....	27	30	22	24
Lincoln, Nebr.....	26	15	20	19					
Minneapolis, Minn.....	60	47	74	60	San Juan, P.R.....	1	1	2	(---)
Omaha, Nebr.....	41	39	43	34					
St. Louis, Mo.....	112	124	120	126					
St. Paul, Minn.....	34	41	44	35					
Wichita, Kans.....	29	23	17	19					

<sup>o</sup>Current Week Mortality for 108 Selected Cities

\*Estimate - based on average percent of divisional total.  
Totals for previous weeks include reported corrections.

4(A) Total Mortality, all ages..... 11,318  
4(B) Pneumonia-Influenza Deaths, all ages..... 407  
4(C) Total Deaths under 1 Year of Age..... 762  
4(D) Total Deaths, Persons 65 years and over..... 6,227

NOTE: All deaths by place of occurrence.

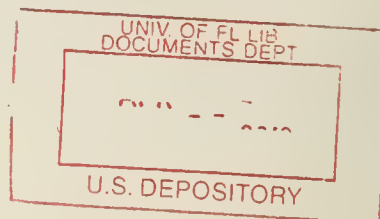


	Barriada Frailes Llanos	Barriada Marrero
Total patients (from 13 to 59 years of age)	43	38
Distribution of Symptoms		
Percent		
Fever	95	97
Headache	91	92
Muscle Pain	86	89
Frontal Headache	84	71
Chills	81	89
Conjunctivitis	79	42
Joint Pain	72	82
Neck Pain	72	82
Back Pain	70	92
Orbital Pain	70	66
G.I. Symptoms	65	58
Rash	49	50
Nausea or Anorexia	44	39
Upper Respiratory Involvement	42	—
Lymphadenopathy	35	34

Notes: These provisional data are based on weekly telegrams to the Communicable Disease Center by the individual State health departments.

Symbols: --- Data not available  
- Quantity zero

Procedures for construction of various mortality curves may be obtained from Statistics Section, Communicable Disease Center, Public Health Service, U. S. Department of Health, Education, and Welfare, Atlanta 22, Georgia.



(Reported by Victor Gonzalez, M.D., Director, Bureau of Health, Puerto Rico Department of Health, and a team from the Communicable Disease Center.)

## INTERNATIONAL NOTES

### Dengue Fever — Jamaica

Nine cases of dengue fever with onset in the first two weeks of September have been reported bringing the total cases thus far in 1963 to 466 cases.

The distribution of these cases according to parishes is as follows: Kingston 121, St. Catherine 118, St. Andrew 195, Portland 52, St. Thomas 27, Clarendon 22, St. James 11, Trelawney 7, St. Elizabeth 5, Manchester 4, St. Mary 3, St. Anne 1. The parishes most affected are in the southeastern part of the island; the two most western parishes have not reported cases. The greatest number of cases reported for any week was 68 during the week ending August 24.

(Reported in *Weekly Epidemiological Report of Pan American Sanitary Bureau*.)

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PUBLIC HEALTH SERVICE  
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